



The National Security Field Experience Initiative (NSFEI) is a science and technology work experience program started in June of 1996. Lawrence Livermore National Laboratory and ALU LIKE, Inc. both contribute separate resources toward the collaboration.

#### NSFEI strives to:

- Develop a workforce qualified to engage in various defense, technological, and environmental activities in the Pacific Region.
- Collaborate on projects that apply science and technology in the national interest and support the defense, economic, and environmental needs of the Pacific Region.
- Integrate cultural values as an important element of the learning and work experience.

The main purpose of this program is to promote science and technology in the Pacific Region, including providing opportunities to local residents so that they can return to Hawai'i and Alaska after their LLNL internship and incorporate the knowledge, skills, and abilities they have acquired to benefit the nation, their states, and local communities.



#### Qualifications for Applicants: Required:

- Age 18 and over and U.S. citizen.
- Security clearance: Able to pass a federal government security clearance background check [for example, review of military and law enforcement records for infractions].
- Successful completion of courses in science and technology or equivalent.

#### Desired:

- Full-time community college student or equivalent.
- Experience in projects that integrate Pacific culture and science and technology in communities that are underrepresented in federal government research and development programs.



#### Regional Security, Earth Science Division, Energy and Environment Directorate

- Update database of seismic stations in South Asia.
- Pick arrival times from seismic data to compute locations of earthquakes in the eastern Mediterranean.



#### Homeland Operational Planning System (HOPS). Nonproliferation, Arms Control, and International Security (NAI) Directorate

- Research and help identify transportation networks critical to Hawai'i and the Pacific region.
- Create and characterize hazardous release scenarios to allow for a better understanding of and preparation for National Security Special Events (NSSEs).
- Assist in creating visual tools that allow data to be made available to facility personnel and event planners for use as a real-time tool and for more efficient emergency response against terrorist threats.



## 2004 Assignments and Practice Areas



#### Electronics Engineering, Laser Engineering Division, National Ignition Facility (NIF) Directorate

- Assist with the installation and check out of critical laser diagnostic components for the National Ignition Facility (NIF).
- Begin Factory Acceptance Testing on the hundreds of laser energy sensors required for NIF.



#### Occupational Environmental, Safety & Health, Safety and Environmental Protection (SEP) Directorate

- Assist with integrating information on Material Safety Data Sheets (MSDS) and other chemical references to highlight pertinent chemical properties, hazards, and regulatory and facility threshold limits.
- Provide ES&H technician support, including performing field work and documenting procedures for training purposes.







**T**echnology Fields: The NSFEl field experiences relate to a range of fields including: computer science, physics, astronomy, chemistry, electronics, data base management, geographical information systems, and technical communications. NSFEl offers skill building in GPS and mapping, Auto-CAD design, computer applications, structured cabling basics (CAT 5), and machine shop design/fabrication, as well as report writing and oral presentations.



### Post-NSFEI College Enrollment in Hawai'i

#### **University of Hawai'i, Hilo**

Computer Science  
Criminal Justice  
Psychology  
Business

#### **University of Hawai'i, Manoa**

Engineering  
Business/Accounting

#### **Maui Community College**

Electronics and Computer Technology

#### **Honolulu Community College**

Computing, Electronics & Networking Technology

#### **Hawai'i Community College**

Electronics

#### **University of Phoenix**



### Post-NSFEI Employment in Hawai'i

#### **Environmental Remediation/Waste Mgmt**

*Unitek, Inc. – Hazardous Waste Storage and Treatment*

*Parsons Engineering, Inc. – Kaho'olawe Island UXO Cleanup*

*UXB Int'l – Kaho'olawe Island UXO Cleanup*

*IT Corp – Barber's Point*

*Underground Tank Cleanup*

*Donaldson Enterprises*

*– Pohakuloa and Waikoloa*

*Vulch Environmental –*

*Environmental Remediation*

*Ho'olana Technologies*

*– TLC Field Kit*

#### **Construction and Infrastructure Support**

*American Standard*

*Concrete Pumping*

*AT&T – power generation/*

*military telecom network*

*Army Reserves – Engineering*

*Division*

*City & County of Honolulu*

*– Solid Waste Management*

#### **Telecommunications and Network Support**

*Summit Communications, Inc.*

*Sandwich Isles*

*Communications*

*Pixinet ISP/Coda Studio/*

*ALU LIKE, Inc. web design*

*Henkels & McCoy, Inc.*

*Pearl Harbor Naval Shipyard*

*Maui High Performance Computing Center (MPHCC)*

*Tripler Army Medical Center, Telemedicine Project*

*Akimeka, LLC.*

*Akamai Info. Tech.*

#### **Optics/Astronomy**

*U.S. Air Force/Nellis Air Force Base, Predator Project*

*Textron Systems Kauai*

*Keck Observatory*

*University of Hawai'i Hilo – Institute of Astronomy*

#### **Education/Teaching**

*Waimea Intermediate School*

*Ka'u High School*

*Hawai'i Technology Institute*



#### **Sponsors:**

U.S. Department of Energy – National Nuclear Security Administration (NNSA)

U.S. Department of Defense

National Science Foundation – Center for Adaptive Optics

U.S. Department of Labor

U.S. Department of Education

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**[www.llnl.gov/NSFEI](http://www.llnl.gov/NSFEI)**

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